

201

7.3
HW

p 454 13-18, 21-23, 27

13.

$$\frac{5}{x} = \frac{x}{9}$$

$$x^2 = 45$$

$$x = 3\sqrt{5}$$

14.

$$\frac{2/2}{3/8} = \frac{18}{y}$$

$$y = 27$$

15.

$$\frac{16}{27} = \frac{27}{z}$$

$$27^2 = 16z$$

$$45 \frac{9}{16} = z$$

(16.)

$$\frac{4}{x} = \frac{x}{9}$$

$$x^2 = 36$$

$$x = 6$$

(17.)

$$\frac{5}{y} = \frac{4}{8}$$

$$y^2 = 40$$

$$y = 2\sqrt{10}$$

(18.)

$$\frac{8}{x} = \frac{x}{6}$$

$$x^2 = 48$$

$$x = 4\sqrt{3}$$

21.

$$\frac{a+5}{4/12} = \frac{12}{18}$$

$$a+5 = 8$$

$$a = 3$$

22.

$$\frac{24}{36} = \frac{6}{b+3}$$

$$9 = 2b+6$$

$$3 = 2b$$

$$\frac{3}{2} = b$$

23.

$$\frac{x}{12} = \frac{12}{16}$$

$$x = 9$$

$$\frac{x}{y} = \frac{y}{x+16}$$

$$\frac{9}{y} = \frac{y}{25}$$

$$y^2 = 9 \cdot 25$$

$$y = 15$$

27.

$$\frac{DC}{15} = \frac{15}{AC}$$

$$AC^2 = 15^2 + 20^2$$

$$AC = 25$$

$$\frac{DC}{15} = \frac{15}{25}$$

$$DC = 9$$

$$25 - 9 = 16 = AD$$

$$\frac{16}{z} = \frac{z}{x+16}$$

$$\frac{16}{z} = \frac{z}{25}$$

$$z = 20$$

$$\frac{16}{BD} = \frac{BD}{9}$$

$$BD = 12$$